

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007015**Date Inspected:** 17-Jan-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei / Sun Bo**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

The Caltrans (CT) Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

**OBG Sub-Assembly Bay 6:**

The QA Inspector randomly observed a ZPMC cutting torch operator, utilizing a track mounted torch cutting apparatus to cut bevels in 62M West Tower Diaphragm WSD1-SA411.

**OBG Sub-Assembly Bay 7:**

The QA Inspector randomly observed ZPMC welder Gu Cai Hong ID 053748, utilizing the Submerged Arc Welding (SAW) Process in the 1G (Flat Groove) Position with ZPMC Weld Procedure Specification (WPS) WPS-B-T-2221-B-L2c-S-2, to weld a butt splice at Weld Joint (WJ) 055 on Side Plate SP591-001 between piece marks SP591A/PL1079B and SP591A/PL1079A. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. The weld parameters appeared to comply with contract requirements.

**OBG Sub-Assembly Bay 9:**

The QA Inspector randomly observed ZPMC welder Song Yin Shu ID 059421, utilizing the Flux Cored Arc Welding (FCAW) Process in the 2G (Horizontal Groove) Position with ZPMC WPS WPS-B-T-2232-TC-U5-F, to

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weld 35 millimeter (mm) I-Ribs to the 28 mm base plate of Deck Plate Sub-Assembly (1AW)-DP565-001 WJ 013.

The QA Inspector randomly observed ZPMC QC monitoring weld parameters. The weld parameters appeared to comply with contract requirements.

OBG Sub-Assembly Bay 12:

The QA Inspector performed a 100% Initial Visual Inspection (VT) on the cover pass of all the reinforcing fillet welds attaching the U-Ribs to Deck Plates DP307-001 (7EE) and DP87-001 (7AW). The QA Inspector marked up several areas for rework in addition to areas already marked up by ZPMC and ABF.

Plate Storage Yard:

The QA Inspector verified material traceability of steel plate from Batch 175 to be cut for Check Sampling, identified the areas to be cut with Caltrans Lot Numbers B216-14-09 through B216-25-09 and the direction of rolling. The cut Check Samples will be prepared for shipment to the testing lab in Shanghai.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Franco,Charlie	Quality Assurance Inspector
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<b>Reviewed By:</b>	Clifford,William	QA Reviewer
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